Session 6D: Sixgill Shark

Questions & Answers

Q: What are the current regulations for dogfish?

A: There is a longstanding commercial fishery for dogfish in Puget Sound, more recently on the coast, which has been up to 4 million gallons a year, which is an awful lot of dogfish to be caught in Puget Sound. The abundance appears to be declining. We have begun a dogfish investigation. Ruston is looking for his thesis topic; he's looking at the policy aspects of the fishery—the relationship between what happens with our regulation, whether [or not] there are regulations, coastal or not. These are all part of what he's going to be investigating. Somewhere around the spring the NMFS begins their tri-annual survey…will begin to do a standard stock assessment. So we'll do a stock assessment and demographic modeling and will begin to know something about this likely prey for the sixgill and it also fits into other requirements that exist for understanding the dynamics of this groundfish.

Q: What are you seeing down the line as far as management? Do you anticipate a need for regulations?

A: When it comes to speaking of regulations, I would have to defer to the Department of Fish and Wildlife, and Greg can best address that. What I would like to assure people who are interested in sixgill viewing opportunities that exist right now is that the current research that we are looking at doing, one of our main goals is to not impact what seemed to be already working right now. There are several natural occurring viewing opportunities for these animals in the northwest. Our greatest goal is not screw with that at this point and to try educate those people who are in the water with the sharks given the mechanism to potentially observe these sharks, give them some additional education and information both to minimize their impact on the sharks behavior, maximize their own safety in this particular encounter. While we would like to encourage them to get additional data, we don't want to do it at the jeopardy of putting them in danger. Any methodologies we work out for more invasive investigations, we'll probably be at alternate locations. With respect to baiting or chumming sharks for commercial exploits that intend to take advantage of opportunities to view the sharks, we are not set up to address that at this time.

Q: The few divers that we have talked to have expressed great interest in seeing sharks in their natural condition. Apparently you were down in the Caribbean, Florida, Virgin Islands or someplace. There are chum sharks there, and people say it's a much more satisfying experience here to figure out where the sharks are going to be?

A: Right now the place to go that's closest to see sharks in super abundance is to go to Prince William Sound in Alaska. The number of salmon shark fins that you can see just standing in the stern of a boat… You can't stand for more that 60 seconds and not see at least two shark fins go by, and you frequently will see sharks breaking the water as they come from below the catch of salmon.

[Question not recorded.]

A: We have not come to a specific consideration, but in Alaska when we have the shark on board we will take a transmitter, embed into a squid and we put little tiny hooks on it and when it's on board we encourage it by shoving it down its throat to ingest this, and we are hoping that the little tiny hooks will catch somewhere on the stomach. It won't hurt and it won't last that long in any event because the stomach is so acidic. We do get transmissions from that for a little while until it ends up being dissolved itself, so that can be done. It's moderately successful, the transmitters are very inexpensive, so it's a reasonably successful thing, whether we would do it here is an open question. I would not want to encourage a shark to eat this transmitter that I had in my hand.

[Question not recorded.]
A: Not sure about that either. You can only go with some of the catch data that we have received, that Greg mentioned. I personally examined young neonates that were taken from the east passage from the commercial fisherman who was active on Vashon Island about 5 to 8 years ago, so we know that they are here. They are being dropped somewhere probably in the deep confines of the east and west passages.

[Question not recorded.]

A: It's illegal to sell dogfish that are caught in Puget Sound under US law because they have high levels of mercury, so it's all exported, mainly to Europe. There's a big market in England, it's called gray fish and they fished out a lot of the dogfish sharks. If you have fish and chips in England, there's a very good chance you are eating Puget Sound dogfish, and there's some sold to Germany, and there's a little bit of smoking going on too, but there's no, it's all for human food now and it's all overseas.

Q: What is the apparent sixgill market on an international scale?

A: No, locally. There are apparently other parts of the world and maybe more subsistence. There was quite a sixgill fishery somewhere in Washington during the '80s. There was quite an escalation of that, people eating a lot of shark but that seems to have fallen off abruptly. The demand just isn't there.

Q: Your point of fisheries per se where the sixgill is targeted, it's kind of in an awkward situation because the small boat type won't have much success bringing in a large sixgill, and there probably is not enough of a population even in the Caribbean. I've seen them in Nicaragua, Costa Rica, Caribbean side, even in those environments it's probably not enough of a population to support a large vessel fishery. That leaves is lots of gaps in information. There was a commercial thresher shark, gill net thresher shark, where sixgills caught as well as thresher shark.

A: There are incidental catches on record. Early in the 1980s, before we learned better to maintain sixgill sharks in captivity. And those were by catch and were taken from just below the Narrows.

Q: What is the pathway for the high levels of mercury in the dogfish? They seem to be eating some of the same prey that other species eat and don't necessarily have high levels of mercury?

A: It's through their diet and they live to be a long period of time, and I think Vince showed a graph looking at dogfish that are 30 years and older so accumulated over time, they don't really metabolize it or secrete it so once they consume it, it pretty much stays with them and builds up over time.